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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,731	04/09/2004	Yu-Jen Chuang	250122-1470	1519

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EXAMINER
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CARTER, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/821,731	<b>Applicant(s)</b> CHUANG ET AL.	
	<b>Examiner</b> William J. Carter	<b>Art Unit</b> 2875	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                       |                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Mai (6,871,979).

With respect to claim 1, Mai shows, a direct backlight module comprising: a first plate (50); a second plate (46) connected to the first plate forming a space between (Fig. 2); a plurality of light sources (44) disposed in the space; and a third plate (52) with a plurality of openings (58) disposed outside the space directly contacting the first plate where they meet and are fused (Fig. 2). As stated in the applicant's remarks, "the third plate 52 does directly contact the first plate 50" (page 8, lines 22-23).

As for claim 2, Mai shows, the direct backlight module wherein the first plate comprises: a plurality of protrusions; and a plurality of recesses, wherein the plurality of protrusions and recesses are alternately arranged, and the plurality of light sources are disposed in the plurality of recesses (Fig. 2).

As for claim 3, Mai shows, the backlight module wherein the plurality of openings (58) are disposed corresponding to the plurality of protrusions and form a plurality of

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channels (Fig. 2). "Corresponding" does not mean to "align with" as argued, it only means that the two components need to have positions based on one another, as shown in (Fig. 2).

As for claim 8, Mai shows, the backlight module wherein the cross-section of the plurality of protrusions and recesses is trapezoidal-shaped (Fig. 6).

AS for claim 9, Mai shows, the backlight module wherein the cross-section of the plurality of protrusions and recesses is triangular-shaped (Fig. 2).

As for claim 10, Mai shows, the backlight module wherein the first plate is a reflector plate (50).

As for claim 11, Mai shows, the backlight module wherein the second plate is a diffusion plate (46).

As for claim 13, Mai shows, the backlight module wherein the plurality of light sources (44) are lamps.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mai in view of Skinner et al. (6,417,832).

Mai teaches all of the claimed elements, as disclosed above, except for the backlight module further comprising an enforced heat dissipation device disposed at the channel, wherein the device is a fan. Skinner, drawn to cooled backlighting, teaches an enforced heat dissipation device that is a fan (29) disposed at (claim 15(e)) cooling channels (61, 62, 63). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the fan of Skinner at the channel of Mai, in order allow cool air to enter behind each lamp (Abstract). Further "disposed at" does not entail "the air flow produced by the enforced heat dissipation device runs along the channel," as is stated in the applicant remarks – the fan could be disposed at the channel and oriented in such a direction to produce air flow across the channel rather than along the channel. In this rejection, as in the previous rejections, the proper motivation is and was taught in the prior art (Abstract).

***Allowable Subject Matter***

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest the backlight module wherein the third plate comprises a plurality of flexible portions respectively connected to the sides of the channels.

***Conclusion***

A Final

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Mai teaches all of the claimed elements, as disclosed above, except for the backlight module further comprising an enforced heat dissipation device disposed at the channel, wherein the device is a fan. Skinner, drawn to cooled backlighting, teaches an enforced heat dissipation device that is a fan (29) disposed at (claim 15(e)) cooling channels (61, 62, 63). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the fan of Skinner at the channel of Mai, in order allow cool air to enter behind each lamp (Abstract). Further "disposed at" does not entail "the air flow produced by the enforced heat dissipation device runs along the channel," as is stated in the applicant remarks – the fan could be disposed at the channel and oriented in such a direction to produce air flow across the channel rather than along the channel. In this rejection, as in the previous rejections, the proper motivation is and was taught in the prior art (Abstract).

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***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Carter whose telephone number is (571)272-0959. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee S. Luebke can be reached on (571)272-2009. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

wjc  
08/12/05

  
RENEE LUEBKE  
PRIMARY EXAMINER